

Amendments to the Abstract

Please amend the Abstract to read.

-- There is provided an address generation apparatus for one of an interleaver and a deinterleaver in a Wideband Code Division Multiple Access (W-CDMA) system. The apparatus includes an address pair generator ~~(300)~~ for generating an address pair $(n, P(n))$ in real-time for one of an interleaver operation and a deinterleaver operation that includes inter-row permutation and intra-row permutation. The address pair $(n, P(n))$ is generated such that, for the interleaving operation, data to be interleaved are read out from the at least one memory device ~~(350,360)~~ using the $P(n)$ and interleaved data are written into the at least one memory ~~(398,399)~~ device using the n . Further, the address pair $(n, P(n))$ is generated such that, for the deinterleaving operation, data to be deinterleaved are read out from the at least one memory device using the n and deinterleaved data are written into the at least one memory device using the $P(n)$. --